

Claims:

1. An apparatus for retaining model structural members in position during construction of a model structure, comprising:

a base member having a plurality of recesses therein; and

5 at least one retainer having a peg having a first transverse dimension complementally sized with said recesses for removable receipt therein and a flange having a second transverse dimension greater than the first transverse dimension and sized for holding a model structural member between the base member and the flange.

10 2. An apparatus as set forth in claim 1, wherein the base member is substantially planar.

3. An apparatus as set forth in claim 1, wherein the recesses are holes extending through the base member.

15 4. An apparatus as set forth in claim 1, including a multiplicity of said recesses arranged in a plurality of rows and columns.

5. An apparatus as set forth in claim 4, wherein the spacing between adjacent recesses in said rows and in said columns is substantially constant.

6. An apparatus as set forth in claim 1, wherein said base member is constructed of a synthetic resin material.

20 7. An apparatus as set forth in claim 1, including a carrier removably mounting said base member thereon.

8. An apparatus as set forth in claim 7, wherein said carrier includes a pair of side rails, said base member being sized for slidable receipt between said side rails.

25 9. An apparatus as set forth in claim 1, wherein said peg is sized and configured for pivoting within said recesses and frictional engagement with the base member surrounding said recesses.

10. An apparatus as set forth in claim 1, wherein said retainer includes a lobe having a circumscribing engagement surface and positioned intermediate said peg and said flange.

30 11. An apparatus as set forth in claim 10, wherein said lobe has a third transverse dimension larger than said first transverse dimension and smaller than said second transverse dimension.

35 12. An apparatus as set forth in claim 11, wherein said engagement surface is eccentrically positioned relative to said peg.

13. An apparatus as set forth in claim 12, wherein said lobe is substantially circular having a center axis, and wherein said peg is circular in cross section and has a pivot axis spaced from said center axis.

5 14. An apparatus as set forth in claim 13, wherein the retainer includes a handle positioned on said flange extending opposite said peg.

15. An apparatus as set forth in claim 14, wherein said retainer is of unitary construction.

10 16. An apparatus as set forth in claim 15, further including at least one model structural member having a thickness, said engagement surface having a height between the flange and the peg substantially corresponding to the thickness of the model structural member.

17. An apparatus as set forth in claim 16, further including a clip having a frame including a plurality of edges and including an arm on the frame sized for holding the model structural member against the edge.

15 18. An apparatus as set forth in claim 17, wherein said arm includes a shoulder extending outwardly from said frame and a finger spaced from one of said edges for receiving and holding a model structural member in a space located between the said one of said edges and said finger.

20 19. An apparatus as set forth in claim 18, wherein said frame is substantially triangular in configuration.

25 20. An apparatus as set forth in claim 19, including a plurality of said clips, at least one of said plurality of clips having a first triangular configuration and at least another of said plurality of clips having a second triangular configuration different from said first triangular configuration.

21. A method of retaining model structural members during construction of a model structure, said method comprising the steps of:

30 providing a base member having a plurality of recesses therein, at least one retainer having a peg of a first transverse dimension complementally sized for receipt in said recesses and a flange having a second transverse dimension substantially greater than said first transverse dimension, and a plurality of model structural members;

35 coupling a first of said model structural members to said base member by inserting said peg of said at least one retainer into a recess proximate said model structural member with at least a portion of said model structural member held by said flange against said base member; and

bonding second of said model structural members to said one model structural member.

22. A method as set forth in claim 21, wherein said bonding is provided by adhesive.

5 23. A method as set forth in claim 21, including providing a clip having a frame including at least a first edge and a second edge and an arm extending from said frame and oriented for holding a model structural member against at least one of said edges, and including the step of attaching said clip to one of the first and second model structural members with one of the first and second model structural members aligned along the first edge and the other of the first and second model structural members aligned along the second edge.

10 15 24. A method as set forth in claim 23, including providing a second clip having a frame including at least a first edge and a second edge and an arm extending from said frame and oriented for holding a model structural member against at least one of said edges, and providing a third model structural member, and including the step of attaching said second clip to one of the first, second and third model structural members with two of the first, second and third model structural members aligned along respective first and second edges of said second clip.

20 25. A method as set forth in claim 21, including providing at least three of said retainers, and including the step of bending said first model structural member and positioning said retainers on alternate first and second sides of said first model structural member with the pegs of said retainers received in different recesses for retaining the first model structural member between said base member and said retainers in a bent configuration.

25 30 26. A method as set forth in claim 21, wherein said retainer includes a lobe having a circumscribing engagement surface located between said flange and said peg, said engagement surface being eccentrically positioned relative to said peg, and including the step of pivoting said retainer with said peg in said one of said recesses for moving said engagement surface against said first model structural member.

30 35 27. A retainer for holding model structural members to a member having a recess therein, said retainer including a peg having a first transverse dimension, a flange having a second transverse dimension larger than said first transverse dimension, and a lobe positioned intermediate said peg and said flange and having a third transverse dimension greater than said first transverse dimension and less than said second transverse dimension, said lobe including a circumscribing engagement surface which is positioned in eccentric relationship to said peg.

28. A retainer as set forth in claim 27, wherein said retainer is of unitary, synthetic resin construction.

29. A retainer as set forth in claim 28, wherein said lobe has a substantially circular engagement surface defining a center of the lobe and wherein said peg is offset relative to the center of the lobe.

30. A retainer as set forth in claim 29, including a handle extending from the flange opposite the peg.

31. A clip for attachment to model structural members, said clip including a frame having a plurality of edges and at least one arm extending outwardly from the frame and including a shoulder and a downwardly extending finger defining a space between the frame and the finger sized for holding a model structural member therebetween.

32. A clip as set forth in claim 31, wherein said frame is substantially triangular in shape having three edges with angles between the edges.

33. A clip as set forth in claim 32, wherein each of the edges has a respective arm extending outwardly therefrom.

34. A clip as set forth in claim 33, wherein each of the frames has a top surface and each of the shoulders has a bottom surface substantially co-planar with the top surface.

35. A clip as set forth in claim 31, wherein the clip is of unitary construction of synthetic resin and the finger is flexible to permit biasing of the finger against a structural member received between one of the edges and the finger opposite thereto.